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ABSTRACT

While investigations of the impact of parental factors on children's career choices have identified variables that appear predictive of career choice in males, variables which influence career choice in females are less well documented. This study used social learning theory as a framework for examining the impact of parental reinforcement, modeling, and attitudes on the career choices of women. Two groups of female college students (N=165) completed a 47-item Likert-type questionnaire assessing their perceptions of their parents' reinforcement patterns, modeling behaviors, and attitudes. Career choices were categorized as traditional or nontraditional. Discriminant analysis was used to predict career choice. Four underlying factors of parental attitudes and reinforcements were isolated: maternal traditional dimension, paternal traditional dimension, parental support for career academic effort dimension, and parental support for career success dimension. Analyses indicated that parental support for academic effort was a significant predictor of career choice. The findings suggest that parental reinforcement of academic effort is a significant correlate of career choice, traditional or nontraditional, across heterogeneous groups of women, controlling for age, socioeconomic status, marital status, grade point average, and place of residence. Findings have implications for parents and practitioners. (NB)

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PREDICTING CAREER CHOICE IN COLLEGE WOMEN: EMPIRICAL TEST OF A THEORY-BASED MODEL

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ABSTRACT

The impact of parental factors on the career choices of women was investigated.

Analyses suggest that parental reinforcement of academic effort is a significant correlate of career choice.

Key words: Women's career choice, parental influence, social learning theory, traditional and non-traditional careers, discriminant analysis

Introduction

While the impact of parental factors on childrens' career choice has been investigated (Goodale and Hall, 1976; Venerable 1974; Vetter, 1978; Lyons, 1977), and certain variables appear predictive of career choices in males, variables which influence career choice in females are less well-documented. A major concern of theorists and practitioners in the career development field today is the applicability of theories based largely on male career patterns to female career development (Hansen and Rapoza, 1978). In spite of the increasing participation of women in the labor force, factors that impinge upon the career development patterns and career choices of women are little understood are largely unstudied (Oppenheimer, 1978; Vetter, 1978). It is evident that a need exists to study the career choices of women as they are affected by parental factors, and to develop a comprehensive model of female career choice.

In order to address this need, a model predicting women's career choice based on parental modeling and attitudinal variables which controlled for differences in age, ability, major field, marital status and socioeconomic status (SES) was designed. It is detailed below.

It was hypothesized that choice of occupation may be influenced by the role models parents established in the early identification process and by the degree to which parental attitudes reinforce the

role(s) presented. Occupational choices can be limited or expanded by observing the consequences of one's parents' perceived job performance (Eisler, 1981; Bandura and Walters, 1959). This study looks at a model of career choice in women, which specifically posits parental influences as antecedents of career choices of women in two different geographical locations.

Taking a social learning theory perspective, three factors of parental influence were investigated. These factors are parental reinforcement patterns, parental modeling, and parental attitudes toward career choice. Parental reinforcement, defined as patterns of behavior which increase the likelihood of an event occuring, were measured via a self-report questionnaire, discussed in a later section of the paper. Parental modeling, defined as the level of attainment of either parent which an individual is likely to reproduce (including educational, occupational levels, salary, or patterns of employment), was measured in terms of years of education and of category of employment. Parental attitudes are defined as parental beliefs, values, and/or emotions perceived by their daughters regarding female employment in general and, in specific, their mother's employment. The daughters' own academic and career achievements and aspirations were also measured via the self-report questionnaire.

Following a system developed by Bielby (1978), career choices were classified as traditional (60% or more of the persons in the job category are women) or non-traditional (60% or more of the persons in the job catergory are male). Examples of traditional careers are nursing, home economics and elementary school teaching. Non-traditional careers are those like engineering, architecture or college teaching, predominantly held by men at this time.

The present study investigated the relationship between these parental factors and the traditional or non-traditional nature of daughters' career choices.

I. Method

Data was collected via a self-report questionnaire which recorded personal characteristics (e.g. age, marital status, career choice) and included 47 Likert-style items assessing maternal and paternal attitudes toward the importance of careers for women. This inventory included items from Lyon's (1977) scale measuring parental reinforcement and modeling patterns. The 47 items were scaled from 1 "strongly agree" to 7 "strongly disagree". Typical items such as "My (parent) felt it was more important for me to have a family of my own than a career" were asked of the daughter regarding the fathers' and mothers' attitudes. Items were recoded where necessary so that lower scores represent traditional attitudes and higher scores represent non-traditional attitudes.

The underlying theory attempts to explain career choice (traditional or non-traditional) in terms of personal characteristics (major, age, marital status and grade point average (G.P.A.), parental modeling of career and achievement behaviors (level of parental education and parental employment) and parental attitudes toward and reinforcement of these behaviors (the four factors measured by the questionnaire items). A discriminant function predicting career choice (traditional vs. non-traditional) was set up with choice of major (traditional = 0; non-traditional = 1), age, marital status (married = 0; other = 1), G.P.A. and mother's and father's educational (high school or less = 0; more than high school = 1) and mother's and father's occupation (for father, 0 =

non-professional; 1 = professional and for mother, 0 = housewife; 1 = other) and scores for each of the 4 factors as independent or predictor variables.

In a discriminant function, an individual's scores on a group of independent or predictor variables can be used to predict his/her corresponding score on a dependent variable, such as group membership. Predicted membership is compared to actual membership to judge the goodness of fit of the model, keeping in mind that by chance 50% of the cases would be expected to be correctly classified. The adequacy of the theory being tested is measured by the ability of the set of independent variables to be used to correctly classify individuals into the correct outcome group at greater-than-a-chance level, in this case, based on traditional or non-traditional career choice. The resulting function, which was calibrated on one sample group and validated on the other, correctly classified 78% of the validation sample. Ninety-two percent of the calibration sample were correctly classified (see Table 3).

The questionnaire was administered to 216 women. One hundred and eleven attended a Midwestern, urban, public, 4-year commuter university; 84 of these women had useable data. The characteristics of this group, called the calibration sample, are shown in Table 1.

The remaining 105 women attended a southern, 4-year, public, residential university; of this group 81 had useable data. The discriminant function calibrated on the first sample group was validated on the second group of women, referred to as the valida-

tion sample. Their characteristics are also displayed in Table 1 also.

The women in the calibration sample are older, more likely to be married and more likely to have traditional majors and career choices than the validation sample. The women in the calibration group are generally lower in SES than the validation sample as measured by father's income. It was hypothesized that though the characteristics of the sample groups differed, the influence of paternal and maternal modeling and reinforcement would be similar in both groups of women. The calibration and subsequent validation of the classification function with these two groups provides a robust test of the underlying model.

The 47 questionnaire items measuring parental attitudes and reinforcements were factor analyzed for the women in the total sample. Four a priori factors, two maternal and two paternal, were expected. The results produced four underlying factors: a maternal traditional dimension, a paternal traditional dimension, a parental support for academic effort dimension, and a parental support for career success dimension (see Table 2). Factor scores for each individual were calculated and used in subsequent analyses.

II. Results

The results of the discriminant analyses are shown in Table 4. The standardized coefficients show the relative importance of each variable in explaining the overall discriminant function for each group (Sanathanan, 1975). Choice of major is of the greatest importance in explaining or predicting career choice for both groups, as would be expected.

For the calibration sample, marital status (.33), father's (.16) and mother's educational (.20) level are also significant predictors of career choice, with being married and higher parent educational levels being associated with non-traditional career choice.

For the validation sample, major choice (.96), parental support for academic effort (.31) and mother's education (.20) are significant predictors of career choice. For this group, parental reinforcement of academic effort and higher levels of education for mothers were associated with non-traditional career choice.

Controlling for choice major, Factor 3, representing paternal support for academic effort makes a contribution to the overall function for both groups of women. None of the other factors representing parent attitude and reinforcement are significant predictors of major choice. Specific items loading on or defining Factor 3 are listed in Table 2. The items generally focus on mother's or father's support for academic effort and achievement. Since the factor makes a positive contribution to the overall discriminant function, it implies that women whose parents' attitudes positively reinforced their academic efforts were more likely to choose a non-traditional career than other women.

III. Discussion

These analyses suggest that the influence of paternal modeling, as measured by years of schooling, has a greater influence on the more hetergeneous, lower SES women in the calibration sample than on the other group of women. For both groups of women maternal modeling, as measured by years of schooling, is

positively related to career choice. This suggests that the mothers of daughters who choose non-traditional careers are likely to have higher levels of education than the other mothers.

The higher percentage of non-traditional career choices in the higher SES validation sample (see Table 1) confirms the finding of other studies that females from high SES families show more variation in career choice than females from low SES families. This difference may be a result of the lack of financial pressure to choose a job or work in contrast to the presence of a financial need to work for the lower SES group. Additionally, within the lower SES group, married women, who presumably face less financial pressure than single women, also chose non-traditional careers more frequently. Financial security may allow these women to "risk" a non-traditional career instead of going with a "sure thing" traditional career. Neither marital status nor father's education are significant predicators for the validation sample, probably owing to the lack of variation in these variables within the more homogenous validation group.

Parental reinforcement of daughter's academic behaviors, as measured by Factor 3, the support for academic effort factor, influences career choice positively for both groups. This suggests that reinforcement of academic achievement through parental attitudes and reinforcement patterns is a determinant of career choice, traditional or non-traditional, for college-age women of varying backgrounds and in divergent settings.

IV. Summary

This study sought to examine the influence of parental

modeling, reinforcement, and attitudes on the career choice of women. Social learning theory was selected because of its adherence to operational definitions and because the aforementioned concepts are basic to its foundations.

Using discriminant analyses techniques, the relative importance of the four underlying factors was isolated and the impact of parental support for academic effort and sucess was found to be a significant predictor of career choice. Maternal and paternal reinforcement as in Factor 3 (see Table 2) appears to be a better determinant of career choice than the influence of either parent alone (e.g. Factor 1 or Factor 2).

Earlier research which failed either to isolate specific parental factors or to measure their effect on female career choice was unable to clarify how socialization patterns affected career choice. The impact of maternal employment status, reinforcement patterns and attitude has been studied but this impact was not easily separated from the effects of familial SES, often dictated by paternal occupational status. Thus it has not been clear exactly what factors influence career choice in women nor how they do so.

The current study isolated four underlying factors of parental attitudes and reinforcements (a maternal traditional dimension, a paternal traditional dimension, a parental support for academic effort dimension and a parental support for career success dimension). Analyses indicate that one of these, parental support for academic effort, is a significant predictor of career choice. Thus, parents who provide little reinforcement for academic effort

appear to be more likely to contribute to traditional career choice than parents who provide higher degrees of reinforcement for academic success.

A possible explanation for the non-significant predictive value of Factor 4, parental support for career success and effort, may be that all the respondents were currently enrolled as students and thus this factor had not become viable yet.

Future research should take this fact into account and expand the area of inquiry to include women who have completed their education and are currently employed and to include parental reinforcement for academic and career success.

The implications of this finding are quite profound. Although we have come to realize the importance of parental influences, the identity of these factors has not been clear. The current study has defined a model for predicting women's career choice which makes explicit the effect of parental reinforcement of academic effort. That this model holds true for two divergent groups of women further strengthens its significance.

Students of career development in women can now examine this phenomenon with a clearer view of its significance. In addition, practitioners who counsel women and the parents who influence their daughters can be made aware of the impact of their behavior and reinforcement patterns on their child's career choice.

As with all research in this area, it is also clear that while these variables influence career decision making, their impact differs, depending on personal and demographic factors. However, the effects of parental reinforcement on academic effort

appear to influence career choice across socioeconomic, geographic, marital and age groups.

Table 1

Sample Student Characteristics

	Age	
	Calibration	Validation
Mean	36	25
Median	36	21
Mode	21	20
Range	18-65	18-62

	GPA	
	Calibration	Validation
Mean	3.34	3.08
Median	3.50	3.00
Mode	4.00	4.00
Range	2.00-4.00	1.90-2.80

	Major	
	Calibration	Validation
Traditional	71	47
Non-traditional	34	56
Missing	6	2

	Career Choice	
	Calibration	Validation
	68	41
	38	58
	5	6

	Marital Status	
	Calibration	Validation
Married	52	15
Not married	59	89

	Student Level	
	Calibration	Validation
Fresh	7	12
Soph	14	17
Junior	24	22
Senior	25	26
Masters	30	11
Other	6	16
Missing	5	1

	Father's Occupation	
	Calibration	Validation
Non-professional	37	11
Professional	49	92
Missing	25	2

	Father's Education	
	Calibration	Validation
HS or less	74	24
HS or more	33	80
Missing	4	1

	Mother's Occupation	
	Calibration	Validation
Housewife	42	33
Other	60	71
Missing	9	1

	Mother's Education	
	Calibration	Validation
HS or less	28	68
HS or more	81	37
Missing	2	--

Table 1 (cont.)

	Father's Income	
	Calibration	Validation
$5000 or less	2	--
$5001 - 10,000	3	2
10,000 - 15,000	9	8
15,000 - 20,000	10	6
20,000 - 25,000	7	11
25,001 - 30,000	10	9
30,001 - 35,000	11	14
35,001 - 40,000	2	12
)$40,000	10	30
X	5	7
Mode	7	9
Median	6	7

Table 2

Pooled Groups Factor Analysis

FACTOR 1 MATERNAL TRADITIONAL

Item #	Item	Factor Loading
36.	My mother felt that a high school education, or, at most, a two year college program was sufficient schooling for me.	.68
39.	As a teenager, I felt that my school work was less important to my mother than good times with friends.	.58
41.	My mother felt that a career was less important than raising a family of my own.	.72
44.	My mother discouraged me from pursuing a career that is highly competitive and requires much effort on my part.	.72
45.	It was unimportant to my mother that I go to college.	.52
47.	It meant a great deal to my mother that I receive good grades in college.	.51
48.	My mother disapproved of the career interests that I expressed.	.67
61.	My mother believed that academic achievement was just as important for females as it was for males.	.53
63.	My mother felt that career satisfaction was just as important for women as it was for men.	.63
64.	My mother disapproved of women working outside the home.	.62
65.	My mother stressed social achievements and activities above academic ones for women.	.66
66.	My mother believed that women should not aspire to careers equal to that of men, but should be satisfied taking care of a home and family.	.72

FACTOR 2 PATERNAL TRADITIONAL

Item #	Item	Factor Loading
23.	My father felt that it was more important for me to have a family of my own than to have a career.	.61
25.	My father felt that a high school education, or maybe one or two years of college, was enough schooling for me.	.50
27.	My father disapproved of the career goals I set for myself.	.47
28.	As an adolescent, I felt that my social activities were more important to my father than my school work.	.40
32.	I received no encouragement from my father to go on to college.	.48
34.	My father discouraged my going into a field of work that is high competitive and demanding.	.49
52.	My father felt that it was just as important for a woman to have a career as a man.	.55
53.	My father approved of women working outside the home.	.70
54.	My father approved of my mother's past employment.	.54
55.	My father felt that women should receive the same satisfactions and rewards from their jobs as men.	.63
56.	My father felt that raising a family was more important than a career for most women.	.68
57.	It was important to my father that my mother stay home and raise a family rather than work.	.55
58.	My father often said that women need not strive for the same career goals as men, nor work as hard as men.	.76
59.	My father believed that social activities are more important for women than men.	.63

FACTOR 2 PATERNAL TRADITIONAL (cont.)

Item #	Item	Factor Loading
61.	It was my father's belief that academic success was much less important for females than for males.	.69
67.	My mother believed that her job satisfaction was just as important as my father's.	-.41
68.	My mother preferred raising a family to working outside the home.	-.31

FACTOR 3 Press for Academic Effort and Success

Item #	Item	Factor Loading
21.	I received much approval from my father for good grades in high school.	.69
22.	My father encouraged me to take college courses that were stimulating and challenging to me, even though these courses were not always easy.	.56
26.	The honors and awards that I received throughout my school years were a source of pride to my father.	.75
29.	Even when I was in elementary school, my father was proud of my good grades.	.74
31.	It was important to my father that I maintain a high academic average in college	.57
33.	It was important to my father that I choose a satsifying career, even though many years of preparation might be required.	.53
35.	My father felt that personal satisfaction, rather than financial security, should be my primary consideration in choosing a career.	.39
37.	As I remember, my good grades in elementary school were a source of pride to my mother.	.43
38.	My mother discouraged me from taking easy courses just to get through school, for she felt that the college courses should be challenging to me.	.40
43.	My mother was very proud of the good grades I earned in high school.	.60
49.	It was more important to my mother that I derive personal satisfaction from my work, rather than focus primarily on the financial security the career might afford.	.38

FACTOR 3 (con't) Press for Academic Effort and Success

50. The special awards that I received in school over the years were a source of pride to my mother. .57

51. My father felt that it was important for females to achieve success in school. .53

FACTOR 4 Press for Career Success and Efforts

Item #	Item	Factor Loading
24.	To encourage me in my own goals, my father often cited the accomplishments of sucessful career women.	.69
30.	My father encouraged me to select a career that few women choose to pursue.	.58
40.	My mother encouraged me to strive for a career where I would be one of the few women in the field.	.62
42.	It was important to my mother that I pursue a challenging career, even though many years of study might be required to accomplish this goal.	.51
46.	My mother often talked enthusiastically to me about women who had made successful careers for themselves.	.78
62.	My mother often cited the accomplishments of successful career women.	.77

Table 3

Classification of Career Choice

Actual Membership		Predicted Membership: Traditional	Predicted Membership: Non-traditional
Traditional			
Calibration	59	59	0
Validation	39	32	7
Non-traditional			
Calibration	36	7	29
Validation	61	15	46

92.6% of the calibration sample were correctly "grouped".
78.00% of the validation sample were correctly "grouped".

Table 4

Discriminant Function Coefficients

	Calibration Standarized (Unstandarized)	Validation Standarized (Unstandarized)
Choice of major	1.03 (4.07)	.96 (2.17)
Marital Status	.33 (.67)	--
Support for academic effort (Factor 3)	.20 (.00)	.31 (.00)
Father's education	.16 (.35)	--
Mother's education	.20 (.43)	.20 (.42)

Bibliography

Bandura A. and Walters, R. (1959). Adolescent Aggression, New York: Ronald.

Becker, H. & Murff, R. (1978). Did you know . . . data about freshman career plans. Texas Personnel and Guidance Journal., 6, 71-81.

Bielby, D. D. (1978). Maternal employment and socioeconomic status as factors in daughters' career salience: Some substantive refinements, Sex Roles, 4 (2), 249-265.

Burlin, F. (1976). The relationship of parental education and maternal work and occupational status to occupational aspirations in adolescent females. Journal of Vocational Behavior, 9 (1), 99-103.

Eisler, T. A. (1981). Parental influence on the career choices of women: some cohort differences. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, Va.

Goodale, J. S. & Hall D. T. (1976). Inheriting a career: The influence of sex, values, and parents. Journal of Vocational Behavior, 8, 19-30.

Hansen, S. L. & Rapoza, R. S. (1978). Career Development and Counseling of Women. Springfield, Illinois: Charles C. Thomas.

Lyons, L. (1977, April). The Relationship of parental reinforcement parental modeling, need achievement, and need affiliation to the type of graduate program enrollment of females. Paper presented to American Educational Research Association, New York.

Oppenheimer, V. K. (1968) The sex labeling of jobs. Industrial Relations, 7, 219-234.

Punch, K. & Sheridan, B. (1978). Determinants of aspiration in secondary school students. The Journal of Educational Administration, 16 (2), 175-187.

Sanathanan, L. (1975). Discriminant analysis. In D. J. Amick and H. J. Walberg (Eds.), Introductory multivariate analysis (pp. 236-255). Berkley, California: McCutchan.

Shaffner, S. & Klemer, R.(1973). Parent education for the parental role in children's vocational choices. Family Coordinator, 22, 419-426.

Sorenson, J. & Winters, C. J. (1975). Parental influences on women's career development. In S. H. Osipow (Ed.), Emerging Woman, (pp. 161). Columbus, Ohio: Charles Merrill Publishing Company.

Venerable, W. (1974). Parental influence on college and vocational decisions. Journal of the National Association of College Admissions Counselors, 19, 9-21.

Vetter, L. (1978). Career counseling of women. In S. L. Hansen & R. Rapoza (Eds.). Career Development and Counseling of Women, (pp. 7-26). Springfield, Illinois: Charles Thomas.